

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10695400
Filing Date	2003-10-27
First Named Inventor	Fitzgerald
Art Unit	1743
Examiner Name	Jyoti Nagpaul
Attorney Docket Number	02-027

**U.S.PATENTS**

Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
/J.N./	1	6537506		2003-03-25	Schwalbe et al.	
	2	6508862		2003-01-21	Tonkovich et al.	
	3	6637463		2003-10-28	Lei et al.	
	4	7190580		2007-03-13	Bezama et al.	
	5	6293338		2001-09-25	Chapman et al.	
	6	5544700		1996-08-13	Shagoury	
	7	3847211		1974-11-12	Fischel et al.	
/J.N./	8	5482680		1996-01-09	Wilkinson et al.	

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10695400
Filing Date	2003-10-27
First Named Inventor	Fitzgerald
Art Unit	1743
Examiner Name	Jyoti Nagpaul
Attorney Docket Number	02-027

/J.N./	9	4401155		1983-08-30	Royal et al.	
	10	4343354		1982-08-10	Weber	
	11	4041591		1977-08-16	Noll et al.	
	12	5915469		1999-06-29	Abramzon et al.	
	13	6098706		2000-08-08	Urch	
	14	4282927		1981-08-11	Simmons	
↓	15	5000253		1991-03-19	Komarnicki	
/J.N./	16	6244333		2001-06-12	Bergh et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

**U.S.PATENT APPLICATION PUBLICATIONS**

Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
/J.N./	1	20020031471		2002-06-10	Tonkovich et al.	

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number		10695400
Filing Date		2003-10-27
First Named Inventor	Fitzgerald	
Art Unit	1743	
Examiner Name	Jyoti Nagpaul	
Attorney Docket Number	02-027	

/J.N./	2	20040104010		2004-06-03	Kenny et al.	
	3	20030027354		2003-02-06	Geli	
	4	20020125001		2002-09-12	Kelly et al.	
	5	20040234566		2004-11-25	Qiu et al.	
	6	20020187090		2002-12-12	Vanden Bussche et al.	
	7	20040076562		2004-04-22	Mazanec et al.	
	8	20030043544		2003-03-06	Nelson et al.	
	9	20030173650		2003-09-18	Larsson et al.	
	10	20030118486		2003-06-26	Zhou et al.	
↓	11	20030062149		2003-04-03	Goodson et al.	
/J.N./	12	20020106311		2002-08-08	Golbig et al.	

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10695400
Filing Date	2003-10-27
First Named Inventor	Fitzgerald
Art Unit	1743
Examiner Name	Jyoti Nagpaul
Attorney Docket Number	02-027

/J.N./	13	20060275185	A1	2006-12-07	Fitzgerald et al.	
/J.N./	14	20040033455		2004-02-19	Tonkovich et al.	
/J.N./	15	20050133457		2005-06-23	Tonkovich et al.	
/J.N./	16	20050087767		2005-04-28	Fitzgerald et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button.

**FOREIGN PATENT DOCUMENTS**

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup>	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1							<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button

**NON-PATENT LITERATURE DOCUMENTS**


Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
/J.N./	1	Pan et al., "Optimal Design of Complex Manifold Geometries for Uniform Flow Distribution Between Microchannels," Chem. Eng. J. pp. 1-26 (2007).	<input type="checkbox"/>

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature	/Jyoti Nagpaul/	Date Considered	10/09/2007
--------------------	-----------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

 <b>Form PTO-1449</b> <b>Information Disclosure Citation</b>				Attorney Docket 02-027		Application No. 10/695,400	
				Applicant Fitzgerald et al.			
				Filing Date Oct 27, 2003		Group Art Unit 1743	

U.S. Patent Documents							
Examiner Initial	Patent Number	Date	Name	Class	Sub-Class	Filing Date	
	AA						

Foreign Patent Documents							
	Document Number	Date	Country	Class	Sub-Class	Trans-lation	
/J.N./	AF	DE 10148926A1	4/17/2003	Germany			
↓	AG	DT 2428964A1	1/2/1976	Germany			
	AH	EP 1038575	9/27/2000	Europe			
	AI	WO 02/072252	9/19/2002	PCT			
	AJ	DE 19935433A1	1/8/99	Germany			
	AK	WO 03/080233	10/2/03	PCT			
	AL	WO 03/097229	11/27/03	PCT			
↓	AM	WO 04/042303	5/21/04	PCT			
/J.N./	AN	WO 03/043730	5/30/03	PCT			

Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)		
/J.N./	AR	PCT Search Report from PCT/US2006/012849 mailed Aug 22, 2006 including Written Opinion of the International Searching Authority
↓	AS	Amador et al., "Flow Distribution in different microreactor scale-out geometries and the effect of manufacturing tolerances and channel blockage," Chem. Eng. Journal, 101, pp379-390, 2004.
	AT	PCT International Preliminary Report on Patentability from PCT/US2004/035601
↓	AU	PCT Search Report from PCT/US2004/035601 mailed Apr 12, 2005 including Written Opinion of the International Searching Authority
/J.N./	AV	Zhao et al., "Microchannel Heat Exchangers with Carbon Dioxide," pp. 1-103 (2001).

Examiner /Jyoti Nagpaul/	Date Considered 10/09/2007
-----------------------------	-------------------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

<b>Form PTO-1449</b>  <b>Information Disclosure Citation</b>				Attorney Docket 02-027		Application No. 10/695,400	
				Applicant Fitzgerald et al.			
				Filing Date Oct 27, 2003		Group Art Unit 1743	

U.S. Patent Documents							
Examiner Initial		Patent Number	Date	Name	Class	Sub-Class	Filing Date
	AA						

Foreign Patent Documents							
		Document Number	Date	Country	Class	Sub-Class	Translation
	AF						
	AG						

Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)		
/J.N./	AH	Mas et al., "Scalable Microfabricated Multiphase reactors for Direct Fluorination Reactions," Transducers '03, 655-658 (2003).
	AI	Commenge et al., "Optimal Design for Flow Uniformity in Microchannel Reactors," AIChE Journal, 345-358 (Feb. 2002).
	AJ	Rebrov et al., "Header Design for Flow Equalization in Microstructured Reactors," AIChE Journal, 28-38 (2007).
	AR	Griffini et al., "Effect of Microchannel Plate Design on Fluid Flow Uniformity at Low Flow Rates," Chem. Eng. Technol. 395-406 (2007).
	AS	Bergles et al., "On the Nature of Critical Heat Flux in microchannels," J. Heat Transfer, 101-107 (Jan 2005).
	AT	Balaji et al., "Improved Design of Microchannel Plate Geometry for uniform Flow Distribution," Can. J. Of Chem. Eng., 715-721 (Dec 2006).
↓	AU	Delsman et al., "Microchannel Plate Geometry Optimization for Even Flow Distribution at High Flow Rates," Trans. IChemE Part A, 267-275 (Feb 2004).
/J.N./	AV	Jousse et al., "Compact model for multiphase liquid-liquid flows in microfluidic devices," Lab on a Chip, 646-656 (2005).

Examiner /Jyoti Nagpaul/	Date Considered 10/09/2007
-----------------------------	-------------------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.